

Application Number 10/790,965

Amendment responsive to Office Action mailed February 15, 2008

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-29 (Canceled).

Claim 30 (Previously Presented): A stamper for use in creating replica disk substrates comprising:

a stamper surface defining a data layer; and

a stamper pattern formed in the data layer defined by adjacent stamper lands and stamper grooves, wherein the stamper grooves extend down into the stamper surface, wherein the stamper grooves define stamper groove bottoms and the stamper lands define stamper land tops, wherein the stamper groove bottoms are wider than the stamper land tops and a stamper track pitch is less than 425 nanometers.

Claim 31 (Previously Presented): The stamper of claim 30, wherein the stamper groove bottoms are generally flat and coplanar.

Claim 32 (Previously Presented): The stamper of claim 30, wherein the stamper grooves define a groove depth which is greater than 50 nanometers.

Claim 33 (Previously Presented): The stamper of claim 30, wherein widths of the stamper groove bottoms are greater than 100 nanometers.

Claim 34 (Previously Presented): The stamper of claim 33, wherein the widths of the stamper groove bottoms are greater than 250 nanometers.

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Claim 35 (Previously Presented): The stamper of claim 30, wherein the stamper is a second-generation stamper created from a first-generation stamper, which was in turn created from a master disk, wherein the master disk includes a master pattern like the stamper pattern of the second-generation stamper.

Claims 36-41 (Canceled).

Claim 42 (Currently amended): A second-generation stamper for use in creating replica disk substrates, the second-generation stamper being created from a first-generation stamper, which was in turn created from a master disk, wherein the master disk includes a master pattern that was defined by a mastering photoreistive process, the second-generation stamper comprising:

a stamper surface defining a data layer; and

a stamper pattern formed in the data layer defined by adjacent stamper lands and stamper grooves, wherein the stamper grooves extend down into the stamper surface, wherein the stamper pattern defines a track pitch less than 2 multiplied by a laser spot size associated with a laser used to perform the mastering photoreistive process to define the master pattern of the master disk, wherein the track pitch is less than 700 nanometers.

Claim 43 (Previously Presented): The second-generation stamper of claim 42, wherein the stamper pattern defines stamper lands and stamper grooves and wherein a track pitch of the stamper pattern is less than 425 nanometers and a width of bottoms of the stamper grooves is greater than 25 percent of the track pitch.

Claim 44 (Previously Presented) The second-generation stamper of claim 43, wherein the width of the bottoms of the stamper grooves is greater than 35 percent of the track pitch.

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Claim 45 (Previously Presented) The second-generation stamper of claim 42, wherein the stamper pattern defines stamper lands and stamper grooves and wherein the stamper grooves define bottoms that are flat and coplanar and wherein the stamper groove bottoms include sharp corners.

Claim 46 (Previously Presented) The second-generation stamper of claim 42, wherein the track pitch is less than 1.6 multiplied by the laser spot size.

Claim 47 (New) A stamper for use in creating replica disk substrates, the stamper comprising:

a stamper surface defining a data layer; and

a stamper pattern formed in the data layer defined by adjacent stamper lands and stamper grooves, wherein the stamper grooves extend down into the stamper surface, wherein the stamper grooves define stamper groove bottoms and the stamper lands define stamper land tops, and wherein a track pitch of the stamper pattern is less than 425 nanometers and a width of the stamper groove bottoms is greater than 25 percent of the track pitch.

Claim 48 (New) The stamper of claim 47, wherein the stamper groove bottoms are flat and coplanar and wherein the stamper groove bottoms include sharp corners.

Claim 49 (New) The stamper of claim 47, wherein the stamper grooves define a groove depth between 20 and 120 nanometers.

Claim 50 (New): The stamper of claim 47, wherein the width of the groove bottoms is greater than 35 percent of the track pitch.

Claim 51 (New): The stamper of claim 50, wherein the width of the groove bottoms is greater than 50 percent of the track pitch.

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Claim 52 (New): The stamper of claim 47, wherein the stamper is a second-generation stamper created from a first-generation stamper, which was in turn created from a master disk, wherein the master disk includes a master pattern like the stamper pattern of the second-generation stamper.